

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/462,472 01/14/00 MATSUI

H 0010-1075-0-

HM12/0621

OBLON SPIVAK MCCLELLAND
MAIER & NEUSTADT
1755 JEFFERSON DAVIS HIGHWAY
FOURTH FLOOR
ARLINGTON VA 22202

EXAMINER

FRONDA, C

ART UNIT

PAPER NUMBER

1652

DATE MAILED:

06/21/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/462,472

Applicant(s)
Matsui et al.

Examiner
Christian L. Fronda

Group Art Unit
1652



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-13 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims 1-13 are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 1652

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

- I. Claim 1, drawn to a microorganism belonging to the genus *Escherichia* and having purine nucleoside-producing ability.
- II. Claim 2, drawn to a microorganism belonging to the genus *Escherichia* which has acquired a purine nucleoside-producing ability because of an increase of an activity of an enzyme involved in purine nucleoside biosynthesis
- III. Claim 3, drawn to a microorganism belonging to the genus *Escherichia* which has acquired a purine nucleoside-producing ability because of an increase of an expression amount of a gene for an enzyme involved in purine nucleoside biosynthesis
- IV. Claims 4, 5, and 8, drawn to a microorganism belonging to the genus *Escherichia* which has acquired a purine nucleoside-producing ability because of deregulation of control of an enzyme involved in purine nucleoside biosynthesis
- V. Claims 9 and 10, drawn to a microorganism belonging to the genus *Escherichia* which has acquired a purine nucleoside-producing ability because of blockage of a reaction branching from purine nucleoside biosynthesis and leading to another metabolite.
- VI. Claims 11 and 12, drawn to a microorganism belonging to the genus *Escherichia* which is enhanced in purine nucleoside-producing ability by weakening of incorporation of a purine nucleoside into cells of the microorganism.
- VII. Claim 13, drawn to a method for producing a purine nucleoside by fermentation comprising culturing a microorganism belonging to the genus *Escherichia*.

2. The inventions listed as Groups I-VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The special technical feature of Applicants' invention is the purine nucleoside producing ability of a microorganism belonging to the genus *Escherichia*. Neuhard et al. teach that *Escherichia coli* has a biosynthetic pathway to produce purine nucleosides (see pp. 445-473). Since Applicants' Inventions do not contribute a special technical feature when viewed over the

Art Unit: 1652

prior art, they do not have a single general inventive concept and therefore lack unity of invention.

3. Claims 6 and 7 are generic only to Group III or Group IV. If either Group III or Group IV is selected, then claims 6 and 7 will also be examined.

4. Claim 9 is directed toward the following patentably distinct species of enzymes which are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows: succinyl-adenosine monophosphate synthase, purine nucleoside phosphorylase, adenosine deaminase, inosine-guanosine kinase, guanosine monophosphate reductase, 6-phosphogluconate dehydrase, phosphoglucose isomerase, adenine deaminase, and xanthosine phosphorylase.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each of these enzymes are independent chemical entities and require different literature searches that have different limits, scope, and subject matter.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

5. A telephone call was made to Kirstern A. Grueneberg on June 18, 2001, to request an oral election to the above restriction requirement, but did not result in an election being made.

6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

8. Any inquiry concerning this communication or earlier communications from the examiner

Art Unit: 1652

should be directed to Christian L. Fronda whose telephone number is (703)305-1252. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy, can be reached at (703)308-3804. The fax phone number for this Group is (703)308-0294. Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is (703)308-0196.

CLF


NASHAAT T. NASHED PH.D.
PRIMARY EXAMINER